



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Handwritten initials

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,596	02/28/2002	Robert Charles Webster	13768.239	1963

22913 7590 09/16/2004

WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER &
SEELEY)

60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER

CONTINO, PAUL F

ART UNIT PAPER NUMBER

2114

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,596	Applicant(s) WEBSTER ET AL.	
	Examiner Paul Contino	Art Unit 2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claim 21 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 states “the computer program product ... computer-readable media” where “media” can be interpreted as a non-physical storage media. Claim 22 specifically states the “computer-readable media comprise physical storage media,” which renders claim 21 non-statutory when interpreted as non-physical.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 3-4, and 16-20 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventors, at the time the application was filed, had possession of the claimed invention.

As in claim 3, the limitation “a zero probability of occurrence for that standard function for that projected use pattern” includes description of “a zero probability” which is not taught in the disclosure.

As in claim 4, the limitation “an unknown zero probability of occurrence for that standard function for that projected use pattern” includes description of “an unknown zero probability” which is not taught in the disclosure.

As in claim 16, the limitation “an act of representing each of the plurality of test as an executable file” includes description of “an executable file” which is not taught in the disclosure. Reference to “computer-executable code” is mentioned in the specification, however, code alone does not necessarily constitute an executable “file.”

As in claim 17, the limitation “an act of representing each of the plurality of test as a script file” includes description of “a script file” which is not taught in the disclosure. Reference to “computer-executable code including script” is mentioned in the specification, however, script alone does not necessarily constitute a “file.”

As in claim 18, the preamble of the claim references “an executable file” in line 3 and in the limitation itself in line 4. Please refer to the preceding rejections.

As in claims 19 and 20, the limitation terms “common” and “different,” respectively, are not taught clearly and exactly through the use of the language “[t]he probability tree for each standard function as well as the tests available might be the same” as stated in paragraph [0047] of the disclosure.

* * *

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term “implicit” is ambiguous and indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. (U.S. Patent 5,414,836).

As in claim 1, Baer et al. discloses a computer system (column 4 lines 21-31) that is configured to run one or more software modules (column 3 line 62), a method for testing the [input data] of the one or more software modules as executed on the computer system as the computer system interfaces with one of a plurality of projected use patterns (column 4 lines 5-8), the one or more software modules capable of performing a plurality of [input data], the method comprising the following:

an act of representing probability weights for at least one of the plurality of [input data] for each of the plurality of use patterns (Fig. 5; column 4 lines 2-8);

an act of selecting one of the plurality of projected use patterns for testing, the selected use pattern having a probability weight assigned to each of a plurality of [input data] that may be performed as the computer system interfaces with the selected projected use pattern (column 7 lines 4-6);

a step for determining a[n input data] to [use] based on the probability weight corresponding to the [input data] for the selected projected use pattern (Fig. 10 #112; column 9 lines 30-45).

What Baer et al. does not teach is “standard functionality” as a result of the selecting of a projected path.

It would have been obvious to a person skilled in the art at the time of the invention to have tested the functionality of a software module in place of determination of an input value in the computer system disclosed by Baer et al. This would have been obvious because Baer et al. states the possibility of “perform[ing] the test case (column 3 lines 61-65)” – this implies that the type of “test execution program (column 3 lines 64-65),” or “test case,” to ultimately be executed is dependent upon the corresponding type of input data selected.

As in claim 2, Baer et al. discloses at least some of the probability weights are implicit (column 4 lines 2-8; “implicit” is interpreted as “implied”).

As in claim 5, Baer et al. discloses an act of representing probability weights for at least a phone function for each of the plurality of projected use patterns (Fig. 13; column 10 lines 22-25 where it would have been obvious to have exchanged the input data of a phone number with the function of, for example, dialing a phone number).

As in claims 6 and 7, it would have been obvious to have substituted the phone input data as described in claim 5 with that, for example, of an email address and web address, respectively, and exchanged the phone function as described in claim 5 with that of the function of, for example, sending an email and navigating to a web site, respectively. This would have been obvious because an email address and a web address can be stored and used for communication purposes in a similar manner as the phone number (phone input data) of claim 6. Similarly, the connective functions of sending an email (email function) and navigating to a website (Web

Art Unit: 2114

function) use their respective content (data) in a similar manner as dialing a phone number (phone function).

As in claim 8, Baer et al. discloses an act of receiving a user selection of one of the plurality of projected use patterns for testing (column 4 lines 10-11 where the preset sequence is interpreted as a selection done by the user).

As in claim 9, Baer et al. discloses an act of generating an arbitrary value (Fig. 10 #110; column 9 lines 30-45);

an act of comparing the arbitrary value to the probability weight, or a value derived from the probability weight, assigned to the standard function (Fig. 10 #112; column 9 lines 30-45);

and an act of determining that the standard function is to be performed based on the comparison (Fig. 10 #112; column 9 lines 30-45).

* * *

As in claim 10, Baer et al. discloses an act of representing probability weights for at least one of the plurality of [input data] for each of the plurality of use patterns (Fig. 5; column 4 lines 2-8);

an act of a selecting one of the plurality of projected use patterns for testing, the selected use pattern having a probability weight assigned to each of a plurality of [input data] that may be

Art Unit: 2114

performed as the computer system interfaces with the selected projected use pattern (column 7 lines 4-6);

an act of generating an arbitrary value (Fig. 10 #110; column 9 lines 30-45);

an act of comparing the arbitrary value to the probability weight, or a value derived from the probability weight, assigned to a particular [input data] (Fig. 10 #110 and 112; column 9 lines 30-45);

and an act of determining that the particular [input data] is to be [used] based on the comparison (Fig. 10 #112; column 9 lines 30-45).

What Baer et al. does not teach is “standard functionality” as a result of the selecting of a projected path.

It would have been obvious to a person skilled in the art at the time of the invention to have tested the functionality of a software module in place of determination of an input value in the computer system disclosed by Baer et al. This would have been obvious because Baer et al. states the possibility of “perform[ing] the test case (column 3 lines 61-65)” – this implies that the type of “test execution program (column 3 lines 64-65),” or “test case,” to ultimately be executed is dependent upon the corresponding type of input data selected.

As in claims 11-13, it would have been obvious to have replaced input data with phone, email, and web functionality, respectively [see claim rejections for claims 5-7].

As in claim 14, Baer et al. discloses an act of receiving a user selection of one of the plurality of projected use patterns for testing (column 4 lines 10-11 where the preset sequence is interpreted as a selection done by the user; column 4 lines 25-28).

As in claim 15, Baer et al. discloses an act of representing a plurality of tests that may be performed in response to determining that the particular standard function is to be performed (Fig. 10; column 6 lines 65-68 where the looping and revisiting is interpreted as a plurality of tests in response to passing through the node; column 9 lines 14-21 and lines 43-45).

As in claims 16 and 17, Baer et al. discloses an act of representing each of the plurality of tests as an executable file and as a script file (column 3 lines 65-66 where “input data for a software test execution program” is inherently a type of executable code in a medium such as an executable file or script file in order to carry out such software execution).

As in claim 18, Baer et al. discloses an act of navigating a probability tree associated with the particular standard function for the selected projected use (Fig. 10; column 9 lines 14-21 and lines 43-45; column 3 line 67 through column 4 line 12).

As in claim 19, Baer et al. discloses the particular probability tree is common for the particular standard function across all of the projected use patterns (Fig. 10; column 9 lines 14-45 where the probability tree would be common if looping occurred exclusively across the OR path).

As in claim 20, Baer et al. discloses the particular probability tree is different for the particular standard function for at least some of the projected use patterns (Fig. 10; column 9 lines 14-45 where the probability tree could be different if looping occurred across both the OR and the AND paths).

* * *

As in claim 21, Baer et al. discloses computer-executable instructions for selecting one of the plurality of projected use patterns for testing, the selected use pattern having a probability weight assigned to each of a plurality of [input data] that may be [used] as the computer system interfaces with the selected projected use pattern (Fig. 1; column 4 lines 32-42; column 7 lines 4-6);

computer-executable instructions for causing an arbitrary value to be generated (Fig. 1; column 4 lines 32-42; Fig. 10 #110 and 112; column 9 lines 30-45);

computer-executable instructions for comparing the arbitrary value to the probability weight, or a value derived from the probability weight, assigned to a particular [input data] (Fig. 1; column 4 lines 32-42; Fig. 10 #110 and 112; column 9 lines 30-45);

and computer-executable instructions for determining that the particular [input data] is to be [used] based on the comparison (Fig. 1; column 4 lines 32-42; Fig. 10 #112; column 9 lines 30-45).

What Baer et al. does not teach is “standard functionality” as a result of the selecting of a projected path.

It would have been obvious to a person skilled in the art at the time of the invention to have tested the functionality of a software module in place of determination of an input value in the computer system disclosed by Baer et al. This would have been obvious because Baer et al. states the possibility of “perform[ing] the test case (column 3 lines 61-65)” – this implies that the type of “test execution program (column 3 lines 64-65),” or “test case,” to ultimately be executed is dependent upon the corresponding type of input data selected.

As in claim 22, Baer et al. discloses one or more computer-readable media comprise physical storage media (Fig. 1; column 4 lines 30-45).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Contino whose telephone number is (703) 605-4316 [after approximately October 15, 2004 at (571) 272-3657]. The examiner can normally be reached on Monday-Friday 7:30 am - 5:00 pm, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713 [after approximately October 15, 2004 at (571) 272-3645]. The fax phone number for the organization where this application

Art Unit: 2114

or proceeding is assigned is 703-872-9306 [after approximately October 15, 2004 at (571) 273-3657].

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFC
September 14, 2004



SCOTT BADERMAN
PRIMARY EXAMINER